Arboricultural Impact Assessment

Plus Tree Survey

Huddersfield Cultural Heart
Huddersfield

Report reference: AR-5878-02
September 2022

Report Title:	Arboricultural Impact Assessment Huddersfield Cultural Heart
Report Reference:	AR-5878-02
Written by:	Tom Benson FdSc Arb Trainee Arboricultural Consultant Victoria Black FdSc Arb Principal Arboricultural Consultant
Technical review:	Victoria Black FdSc Arb Principal Arboricultural Consultant Tom Benson FdSc Arb Trainee Arboricultural Consultant
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Approved for issue:	Victoria Black FdSc Arb Principal Arboricultural Consultant
Date:	19.09.2022

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Contents

Summary Statement

The site is located in the centre of Huddersfield, West Yorkshire. The existing site consists of a commercial district in the centre of Huddersfield surrounding the municipal town hall.

The application site is located in the town centre of Huddersfield, West Yorkshire. The site's north boundary joins King Street; the east is bound by Queen Street; the south is bound by Queensgate; and the west is bound by Victoria Lane.

The tree survey revealed a total of thirty-eight individual trees. Of these, three trees were identified as retention category 'B', thirty-four trees were identified as retention category 'C' and one tree was identified as retention category 'U'. There were no retention category 'A' trees identified.

This report should be read in conjunction with the attached Tree Constraints Plan Ref: DR-5878-01 and Tree Survey AR-5878-01.

A plan has been provided by the client to enable an impact assessment of the proposed works on the existing relevant trees within the Site.

Introduction

Purpose of the report

1. This report has been commissioned to provide professional independent, detailed arboricultural advice on relevant trees present at Huddersfield town centre around the municipal town hall.

2. Plans have been provided by the architect/client to enable an impact assessment of the proposed works on the existing relevant trees within the Site.

Impact Schedule

The following schedule identifies the individual tree and its retention category with the main feature(s) of the proposed works likely to cause an impact. The tree references are shown on the tree constraints plan and the tree protection plan. Any mitigation measures are noted.

Tree ref.	Species	Retention category	Proposal feature	Impact	Mitigation
T1	London Plane	B1	None	Retain	Off site no protection required
T2	Whitebeam	C1	Proposal	Remove	Mitigation planting on site
T3	Ash	C1	None	Retain	Off site no protection required
T4	Birch	C1	Proposal	Remove	Mitigation planting on site
T5	Birch	C1	Proposal	Remove	Mitigation planting on site

Tree ref.	Species	Retention category	Proposal feature	Impact	Mitigation
T6	Birch	C1	Proposal	Remove	Mitigation planting on site
T7	Birch	C1	Proposal	Remove	Mitigation planting on site
T8	Birch	C1	Proposal	Remove	Mitigation planting on site
T9	Birch	C1	Proposal	Remove	Mitigation planting on site
T10	Cherry	C1	Proposal	Remove	Mitigation planting on site
T11	Birch	C1	Proposal	Remove	Mitigation planting on site
T12	Cherry	C1	Proposal	Remove	Mitigation planting on site
T13	Lime	B1	Re-design of planter	Possible some minor root loss	Care to be taken Hand tools only within this area. Some possible low level root pruning required. Arboricultural supervision required.
T14	Sycamore	C1	Proposal	Remove	Mitigation planting on site
T15	Norway Maple	C1	Proposal	Remove	Mitigation planting on site
T16	Lime	C1	Proposal	Remove	Mitigation planting on site
T17	London Plane	B1	Re-design of planter	Possible some minor root loss	Care to be taken Hand tools only within this area. Some possible low level root pruning required. Arboricultural supervision required.
T18	Lime	C1	Proposal	Remove	Mitigation planting on site
T19	Beech	C1	Proposal	Remove	Mitigation planting on site
T20	?	C1	Proposal	Remove	Mitigation planting on site

Tree ref.	Species	Retention category	Proposal feature	Impact	Mitigation
T21	Beech	C1	Proposal	Remove	Mitigation planting on site
T22	Cherry	C1	Proposal	Remove	Mitigation planting on site
T23	Cherry	C1	Proposal	Remove	Mitigation planting on site
T24	Rowan	U	n/a	Remove for arboricultural reasons	n/a
T25	Rowan	C1	Proposal	Remove	Mitigation planting on site
T26	Cherry	C1	Proposal	Remove	Mitigation planting on site
T27	Cherry	C1	Proposal	Remove	Mitigation planting on site
T28	Rowan	C1	Proposal	Remove	Mitigation planting on site
T29	Norway Maple	C1	Proposal	Remove	Mitigation planting on site
T30	Cherry	C1	Proposal	Remove	Mitigation planting on site
T31	Cherry	C1	Proposal	Remove	Mitigation planting on site
T32	Cherry	C1	Proposal	Remove	Mitigation planting on site
T33	Cherry	C1	Re-design of planter	Possible some minor root loss	Care to be taken Hand tools only within this area. Some possible low level root pruning required. Arboricultural supervision required.
T34	Cherry	C1	Re-design of planter	Possible some minor root loss	Care to be taken Hand tools only within this area. Some possible low level root pruning required. Arboricultural supervision required.

Tree ref.	Species	Retention category	Proposal feature	Impact	Mitigation
T35	Cherry	C1	Re-design of planter	Possible some minor root loss	Care to be taken Hand tools only within this area. Some possible low level root pruning required. Arboricultural supervision required.
T36	Cherry	C1	Re-design of planter	Possible some minor root loss	Care to be taken Hand tools only within this area. Some possible low level root pruning required. Arboricultural supervision required.
T37	Cherry	C1	Re-design of planter	Possible some minor root loss	Care to be taken Hand tools only within this area. Some possible low level root pruning required. Arboricultural supervision required.
T38	Cherry	C1	Re-design of planter	Possible some minor root loss	Care to be taken Hand tools only within this area. Some possible low level root pruning required. Arboricultural supervision required.

Implications for retained trees

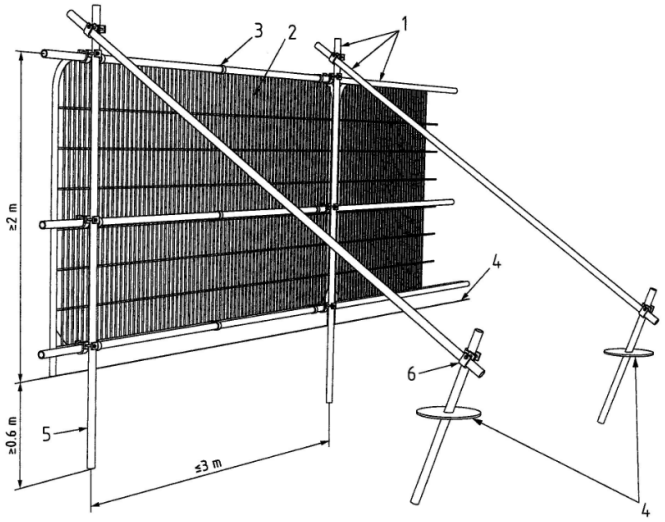
Tree protection

3. Trees and tree groups should be protected from unwanted damage during construction works with temporary tree protection barriers. The barriers should be erected to the outer edge of the tree canopy or the edge of the RPA, whichever is the furthest away from the tree, unless otherwise indicated on the Tree Protection Plan.

4. Tree protection barriers should be the default specification for protective barrier, Figure 2, BS 5837: 2012 Trees in relation to design, demolition and constructions – Recommendations. Where Site circumstances prevent the use of the default barrier, an alternative specification would be recommended by the project arboriculturist with agreement of the local planning authority. The recommended locations for tree protective barriers are shown in Tree Protection Plan.

5. All-weather notices should be attached to the barrier with words such as: "Construction exclusion zone – no access".

6. Where facilitation access is authorised within the RPA temporary ground protection should be installed prior to work starting on Site. The temporary ground protection should be capable of supporting the weight of any traffic/machinery using the Site without being distorted or causing compaction to the ground. It is recommended that the ground of the possible Site compound/storage area is covered in temporary ground protection to minimise soil damage by compaction and conserve soil health through to post-construction planting in this area.



Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Figure 1

Tree work

7. Where pruning work is necessary and authorised to roots or branches of retained trees to enable facilitation works, it should be carried out by a competent contractor in accordance with BS 3998: 2010 Tree Works – Recommendations.

Drainage and utilities

8. Drainage and utilities are expected to be included within the proposed Site works and should not involve digging or trenching within RPA's.

Ground level changes

9. It is our understanding that no ground level changes are required within the root protection area of any tree on this site.

Re-design of existing planters

10. It is proposed to re-design some of the existing planters on site.

11. Care must be taken within this area and only hand tools should be used.

12. Some root pruning may be required. These proposed works should be carried out with Arboricultural supervision to ensure no major roots are lost. If required roots smaller than 25mm diameter may be pruned back where necessary, making a clean cut with a suitable sharp tool, except where they occur in clumps. Roots in clumps or larger than 25mm diameter should be severed only following consultation with an Arboriculturist, as such roots may be essential to the health and stability of the tree.

13. All works within RPA's should supervised by Brooks Ecological.

14. Please refer to the Tree Protection Plan Ref: DR-5878-02 for further details.

Trees to be removed

15. Twenty-seven individual trees are expected to be removed to facilitate the development.

Tree Survey

Huddersfield Cultural Heart
Huddersfield

Report reference: AR-5878-01
March 2022

Report Title:	Tree Survey Huddersfield Cultural Heart
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The site is located in the centre of Huddersfield, West Yorkshire. The existing site consists of a commercial district in the centre of Huddersfield surrounding the municipal town hall.

The application site is located in the town centre of Huddersfield, West Yorkshire. The site's north boundary joins King Street; the east is bound by Queen Street; the south is bound by Queensgate; and the west is bound by New Street.

The tree survey revealed a total of thirty eight individual trees. Of these, three trees were identified as retention category 'B', thirty four trees were identified as retention category 'C' and one tree was identified as retention category 'U'. There were no retention category 'A' trees identified.

This report should be read in conjunction with the attached Tree Constraints Plan Ref: DR-5878-01.

Introduction

Purpose of the report

16. This report has been commissioned to provide professional independent, detailed arboricultural advice on all relevant trees present at Huddersfield town centre around the municipal town hall.

17. This report has been undertaken in accordance with BS 5837:2012 Trees in relation to construction – Recommendations.

18. The client has provided a topographical plan.

19. All findings and recommendations are based on visual observations conducted from ground level during the Site visit only. No other diagnostic procedures were used to establish any extent of internal decay nor was a climbing inspection undertaken.

20. All measurements were obtained with the use of a clinometer and an electronic distometer. On occasion it is not viable to provide accurate measurements due to restricted access or other mitigating circumstances on site, and the data may be estimated.

Legal implications of work to trees

21. Due to the potentially large penalties for illegally carrying out work to protected trees, it is recommended that a check with the local planning authority is carried out prior to any tree works being undertaken and any required consents such as for work to trees with Tree Preservation Orders and/or Conservation Areas are obtained before work to trees on site. Additionally, work to trees at certain times of the year may contravene sections of the Wildlife and Countryside Act regarding nesting and roosting of protected species.

22. Every tree owner has a general duty of care to ensure their tree(s) does not pose an unacceptable risk to other people on or adjacent to their land. The landowner will only be liable for injury or damage caused by trees if they are found to be negligent.

23. There is no legal obligation for a tree owner to cut back growth from a neighbouring property. However, under Common law of tort of nuisance, an affected neighbour has the right to cut back roots or branches that encroach onto a neighbouring property back to the boundary of the land owned by the person abating the nuisance without the neighbour's consent (with the exception of TPO's or CA's). The person abating the nuisance has a duty to exercise reasonable care in carrying out work as a failure to do so may lead to liability in negligence (for example where removal of roots makes a tree unstable).

Site description

24. The site is located in the centre of Huddersfield, West Yorkshire. The existing site consists of a commercial district in the centre of Huddersfield surrounding the municipal town hall.

25. The tree survey revealed a total of thirty-eight individual trees. Of these, three trees were identified as retention category 'B', thirty-four trees were identified as retention category 'C' and one tree was identified as retention category 'U'. There were no retention category 'A' trees identified.

26. The wider landscape is dominated by urban development associated with Huddersfield town centre.

Survey conditions

27. The trees were surveyed in cold, wet, overcast conditions on 2nd February 2022.

Tree data abbreviations and survey methodology

T	Tree	GL	Ground level
G	Tree group	MS	Multi-stemmed
H	Hedge	AFP	Access facilitation pruning
OSB	Outside Site boundary	Ave	Average dimension
#/est	Estimated dimension	Typ	Typical dimension
N	North	E	South
S	South	W	West
Min	Minimum	Lwr	Lower

adj Adjacent Ht Height

28. The trees were assessed visually from ground level. Where access to a tree is restricted this is noted in the schedule.

29. The tree reference numbers refer to the attached Tree Constraints Plan (TCP) references. The trees were not tagged for this survey.

30. The tree species is listed by common name in the schedules, with a key to scientific names below:

Common name	Botanical name	Common name	Botanical name
Alder (common)	Alnus glutinosa	Goat willow	Salix caprea
Alder (grey)	Alnus incana	Hawthorn	Crataegus monogyna
Apple	Malus domestica	Hazel	Corylus avellana
Aspen	Populus tremula	Holly	Ilex aquifolium
Ash	Fraxinus excelsior	Hornbeam	Carpinus betulus
Beech	Fagus sylvatica	Larch	Larix decidua
Birch (silver)	Betula pendula	Lime (common)	Tilia x europaea
Birch (downy)	Betula pubescens	Lime (small-leaved)	Tilia cordata
Chestnut (sweet)	Castanea sativa	Maple (field)	Acer campestre
Chestnut (horse)	Aesculus hippocastanum	Maple (Norway)	Acer platanoides
Cherry (wild)	Prunus avium	Poplar (black)	Populus nigra
Cherry (bird)	Prunus padus	Oak (sessile)	Quercus petraea
Cherry (Japanese)	Prunus serrulata	Oak (pendunculate)	Quercus robur
Leyland Cypress	X Cupressocyparis leylandii	Rowan/mountain ash	Sorbus aucuparia
Elm (English)	Ulmus procera	Sycamore	Acer pseudoplatanus
Elm (wych)	Ulmus glabra	Weeping willow	Salix chrysocoma
		Whitebeam (Swedish)	Sorbus intermedia

31. Measurement of the existing height above ground level of the first significant branch and the direction of growth and the height of the canopy. This informs ground clearance, crown/stem ratio and shading.

32. The stem/trunk diameter is measured with a diameter tape at 1.5m from ground level around the stem for single stem trees and for multi-stemmed trees and other variants in accordance with Annex C of the British Standard. Where access restricts measurement of the tree, an estimate has been made, denoted by '#'.

33. Canopy spread is measured with an electronic distometer. The close-spacing of some of the trees impeded measurements of canopy spread and height and estimates were made.

34. The age of the tree is based on the typical longevity of the particular tree species. The age classes are: young (Y), semi-mature (SM), early mature (EM), mature (M), over-mature (OM) and veteran (V).

35. The physiological condition of the tree is an assessment of its likely health, vigour and stress. The classes for physiological condition are: good, fair, poor and dead.

36. Structural condition includes tree form, visible defects, irregularities and influencing factors.

37. Preliminary management recommendations note work (with prior approval where necessary) to promote the health and longevity of the tree and/or improve safety and/or increase habitat potential.

38. The life expectancy (life exp.) is the estimated remaining contribution in years, (<10, 10+, 20+, 40+).

39. The retention category (ret cat) for each tree is assessed in accordance with BS 5837: 2012 Table 1, summarised as below:

Category A	Trees of high quality with an estimated remaining life expectancy (ERC) of at least 40 years. Green canopy outline on plan.
Category B	Trees of moderate quality with an estimated ERC of at least 20 years. Blue canopy outline on plan.
Category C	Trees of low quality with an ERC of at least 10 years, OR young trees with a stem diameter below 150mm. Grey canopy outline on plan.

Category U	Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. Trees unsuitable for retention. Dark red canopy outline on plan.

40. Sub- categories of 1, 2 or 3 are included in the tree data tables and are defined as follows:

Sub-category 1 trees are those with 'mainly arboricultural value'

Sub-category 2 trees are those with 'mainly landscape value'

Sub-category 3 trees are those with 'mainly cultural or conservation value'.

41. The root protection area (RPA) in m²is for layout purposed and indicates the 'minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority'. The RPA is calculated in accordance with BS 5837: 2012 Annex D. Where Site features are likely to have distorted the typical RPA, a polygon of the same area is estimated on plan to reflect a more realistic shape, in accordance with the British standard.

Tree data

42. The following schedule contains the tree data obtained on site:

Ref	Species	Life stage	Ht (m)	Can Ht (m)	Stem diam (mm)	Canopy spread (m)	Physio logical	Structural condition	Recommendations	Life exp. (yrs)	Ret cat
T1	London Plane	M	15	3.5	500	N 6 E 7 S 6.5 W 7	G	Single vertical stem with a balanced canopy. Base and roots disrupting pavement. Pruning wounds. Bark wounds. No major visible defects. Overhanging footpath and road.	Review tree pit/damage to pavement.	20+	B1
T2	Whitebeam	M	14	4	# 300	# N 4.5 E 4.2 S 4 W 4.2	F	No close access due to location. Single vertical stem with a balanced canopy. Located within compound with high hoardings.	No action required.	20+	C1
T3	Ash	M	17	5	# 380	# N 6.5 E 6.5 S 6.4 W 6.3	F	No close access due to location. Single stem leaning to E with a balanced canopy. Possible ash flower gall. Pruning wounds. Bark wounds. Birds nest in canopy.	Monitor annually.	10+	C1
T4	Birch	EM	7	3	210	N 2 E 3 S 2 W 2	F	Single vertical stem with a balanced canopy. Slight lean to E. Pruning wounds. Bark wounds. Mechanical damage to base. No major visible defects.	No action required.	20+	C1
T5	Birch	EM	9	4	260	N 2 E 4.5 S 3.5 W 2	F	Single vertical stem with a balanced canopy. Slight lean to E. Pruning wounds. Bark wounds. Mechanical damage to base. No major visible defects.	No action required.	20+	C1

Ref	Species	Life stage	Ht (m)	Can Ht (m)	Stem diam (mm)	Canopy spread (m)	Physio logical	Structural condition	Recommendations	Life exp. (yrs)	Ret cat
T6	Birch	EM	11	4.5	245	N 3 E 6.4 S 3 W 2	F	Single vertical stem with a balanced canopy. Slight lean to E. Pruning wounds. Bark wounds. Mechanical damage to base. No major visible defects.	No action required.	20+	C1
T7	Birch	EM	10	3	240	N 3 E 5 S 3 W 3	F	Single vertical stem with a balanced canopy. Slight lean to E. Pruning wounds. Bark wounds. Mechanical damage to base. No major visible defects.	No action required.	20+	C1
T8	Birch	EM	9	3	275	N 3 E 5.5 S 3 W 3	F	Single vertical stem with a balanced canopy. Slight lean to E. Pruning wounds. Bark wounds. Mechanical damage to base. No major visible defects.	No action required.	20+	C1
T9	Birch	EM	12	4	480	N 3 E 7.8 S 5 W 3.5	F	Single vertical stem with a balanced canopy. Slight lean to E. Pruning wounds. Bark wounds. Minor cavities. Mechanical damage to base. No major visible defects.	No action required.	20+	C1
T10	Cherry	M	6	3	425	N 4.5 E 4.2 S 4.2 W 4	F	Single vertical stem with a balanced canopy. Slight lean to E. Pruning wounds. Bark wounds. Mechanical damage to base. Previous reduction. Exposed roots.	No action required.	20+	C1
T11	Birch	M	17	8	295	N 3.3 E 4 S 4.7 W 2.9	F	Single vertical stem with a balanced canopy. Slight lean, self-righting. High canopy. No major visible defects.	No action required.	20+	C1

Ref	Species	Life stage	Ht (m)	Can Ht (m)	Stem diam (mm)	Canopy spread (m)	Physio logical	Structural condition	Recommendations	Life exp. (yrs)	Ret cat
T12	Cherry	M	12	4	510	N 4.2 E 5.5 S 5.6 W 2	F	Single vertical stem with a balanced canopy. Bark wounds. Pruning wounds. Previously reduced.	No action required.	20+	C1
T13	Lime	M	20	3	695	N 9.1 E 7.3 S 6.9 W 8.3	G	Single vertical stem with a balanced canopy. Growing in a raised planter. Bark wounds. Pruning wounds. Overhanging footpath and road.	No action required.	20+	B1
T14	Sycamore	SM	6	2	180	N 3 E 3.2 S 3 W 3.1	F	Single vertical stem with a balanced canopy. Growing in a raised planter. Bark wounds. Pruning wounds. Overhanging footpath and road.	No action required.	20+	C1
T15	Norway Maple	M	18	3	535	N 1.5 E 1.5 S 8.9 W 8	F	Single leaning stem with an unbalanced canopy. Bias to SE. Overhanging footpath and road. No major visible defects.	No action required.	20+	C1
T16	Lime	M	18	6	370	N 3.5 E 4 S 3.5 W 3.5	F	Single vertical stem with a balanced canopy. Pruning wounds. Bark wounds. No major visible defects.	No action required.	20+	C1
T17	London Plane	M	20	4	700	N 11.8 E 4.5 S 5.9 W 9	G	Single stem leaning to E with an unbalanced canopy. No major visible defects.	No action required.	20+	B1
T18	Lime	M	15	5	325	N 6.4 E 6.5 S 2 W 2	F	Single vertical stem with an unbalanced canopy. Overhanging footpath and road. No major visible defects.	No action required.	20+	C1

Ref	Species	Life stage	Ht (m)	Can Ht (m)	Stem diam (mm)	Canopy spread (m)	Physio logical	Structural condition	Recommendations	Life exp. (yrs)	Ret cat
T19	Beech	EM	14	2	300	N 6.5 E 6.2 S 2.9 W 5.5	F	Single leaning stem with an unbalanced canopy. Exposed roots. No major visible defects.	No action required.	20+	C1
T20	?	M	20	8	740	N 8 E 8.2 S 8.4 W 8	F	Single vertical stem with a balanced canopy. Bark wounds. Pruning wounds. Cavities throughout. Possibly hollow at base. Overhanging footpath, road and building.	Monitor annually.	10+	C1
T21	Beech	EM	7	2	290	N 5.6 E 5.7 S 6.8 W 2.9	F	Single vertical stem with a balanced canopy. Busy canopy, birds nest noted.	No action required.	20+	C1
T22	Cherry	M	9	2	250	N 5.7 E 4.2 S 2.7 W 8.4	F	Single vertical stem with an unbalanced canopy. Bark wounds. Exposed roots.	No action required.	20+	C1
T23	Cherry	M	10	2.5	350	N 6.6 E 6 S 4.5 W 6.8	F	Single vertical stem with a balanced canopy. Bark wounds. Exposed roots.	No action required.	20+	C1
T24	Rowan	M	11	3	320	N 3.8 E 4 S 3.6 W 3.5	P	Single vertical stem with a balanced canopy. Decay throughout. Significant historic pruning.	Consider removal.	<10	U
T25	Rowan	M	12	6	220	N 3 E 2.8 S 3.2 W 3	F	Single vertical stem with a balanced canopy. Covered in ivy. Spindly form.	Remove ivy and reinspect.	10+	C1

Ref	Species	Life stage	Ht (m)	Can Ht (m)	Stem diam (mm)	Canopy spread (m)	Physio logical	Structural condition	Recommendations	Life exp. (yrs)	Ret cat
T26	Cherry	M	14	5	340	N 4 E 5 S 1 W 4	F	Single vertical stem with a balanced canopy. Pruning wounds. Bark wounds.	No action required.	20+	C1
T27	Cherry	M	14	3	330	N 4.6 E 4.5 S 4 W 4.2	F	Single vertical stem with a balanced canopy. Covered in dead ivy.	Remove ivy and reinspect.	20+	C1
T28	Rowan	M	9	3.5	220	N 4.2 E 4 S 4.5 W 4.2	F	Single vertical stem with a balanced canopy. Deadwood and stubs noted. Limited inspection. Sparse canopy.	Remove ivy and reinspect.	10+	C1
T29	Norway Maple	M	14	4	420	N 4.5 E 4.7 S 4.5 W 4.2	F	Single vertical stem with a balanced canopy. Covered in dead ivy.	Remove ivy and reinspect.	20+	C1
T30	Cherry	M	18	8	540	N 6.7 E 6.2 S 6.5 W 6.7	F	Single vertical stem with a balanced canopy. Furcates at 4.5M. Bark wounds. Pruning wounds. No major visible defects.	No action required.	20+	C1
T31	Cherry	M	18	6	415	N 6.8 E 6.6 S 6.7 W 6.6	F	Single vertical stem with a balanced canopy. Bark wound to W at 2.5M. Exposed girdle roots. Bark wounds. Pruning wounds.	Monitor annually.	20+	C1
T32	Cherry	M	17	6	445	N 6.5 E 5.5 S 5.5 W 6.5	F	Single vertical stem with a balanced canopy. Pruning wounds. Bark wounds. No major visible defects.	No action required.	20+	C1

Ref	Species	Life stage	Ht (m)	Can Ht (m)	Stem diam (mm)	Canopy spread (m)	Physio logical	Structural condition	Recommendations	Life exp. (yrs)	Ret cat
T33	Cherry	M	4	3	335	N 3.7 E 3.5 S 3.7 W 3.6	F	Single leaning stem with a balanced canopy. Self-righting. Supressed by location at lower ground level.	No action required.	20+	C1
T34	Cherry	M	4	2	110	N 2 E 2.2 S 2.4 W 1.9	F	Single vertical stem with a balanced canopy. Self-righting. Supressed by location at lower ground level.	No action required.	20+	C1
T35	Cherry	M	4	2	220	N 2.5 E 2.4 S 2.5 W 2.6	F	Single leaning stem with a balanced canopy. Self-righting. Supressed by location at lower ground level.	No action required.	20+	C1
T36	Cherry	M	6	2	# 280	N 3.8 E 3.6 S 3.5 W 3.8	F	Single vertical stem with a balanced canopy. Self-righting. Supressed by location at lower ground level.	No action required.	20+	C1
T37	Cherry	M	8	2.5	# 170	N 3.2 E 2.8 S 3.1 W 3	F	Single vertical stem with a balanced canopy. Self-righting. Supressed by location at lower ground level.	No action required.	20+	C1
T38	Cherry	M	6	3	# 180	N 3 E 3.4 S 2.9 W 3	F	Single vertical stem with a balanced canopy. Self-righting. Supressed by location at lower ground level.	No action required.	20+	C1

Findings

Tree descriptions and recommendations

43. The tree survey revealed a total of thirty-eight individual trees. Of these, three trees were identified as retention category 'B', thirty-four trees were identified as retention category 'C' and one tree was identified as retention category 'U'. There were no retention category 'A' trees identified. Please refer above for retention category and definition criteria.

44. It has been recommended that tree T3, T20 and T31 are monitored annually to assess if their condition is still acceptable as significant disease and decay has been noted in bark wounds.

45. Those trees which overhang the public footpaths or public highways, shall require future maintenance to maintain clearance heights for vehicular or pedestrian traffic. These heights should be 5.6m above a road and 2.5m above a footpath.

Figure 1: T1 illustrating damage to the pavement.

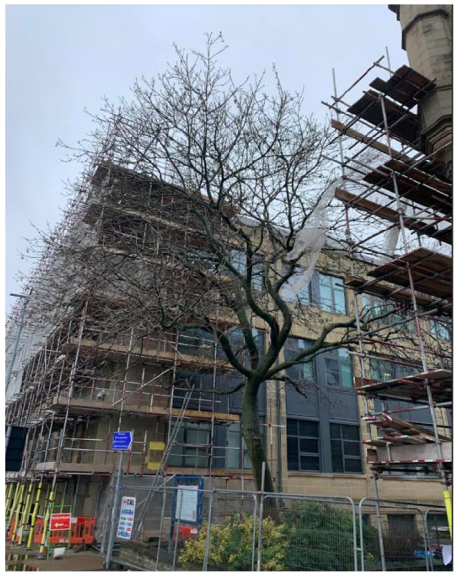


Figure 2: T3, possibly suffering from Ash Flower Gall.

Figure 3: Birch trees growing along Queens gate to the SE of the site.

Figure 4: The base of T20 which appears to be hollow.

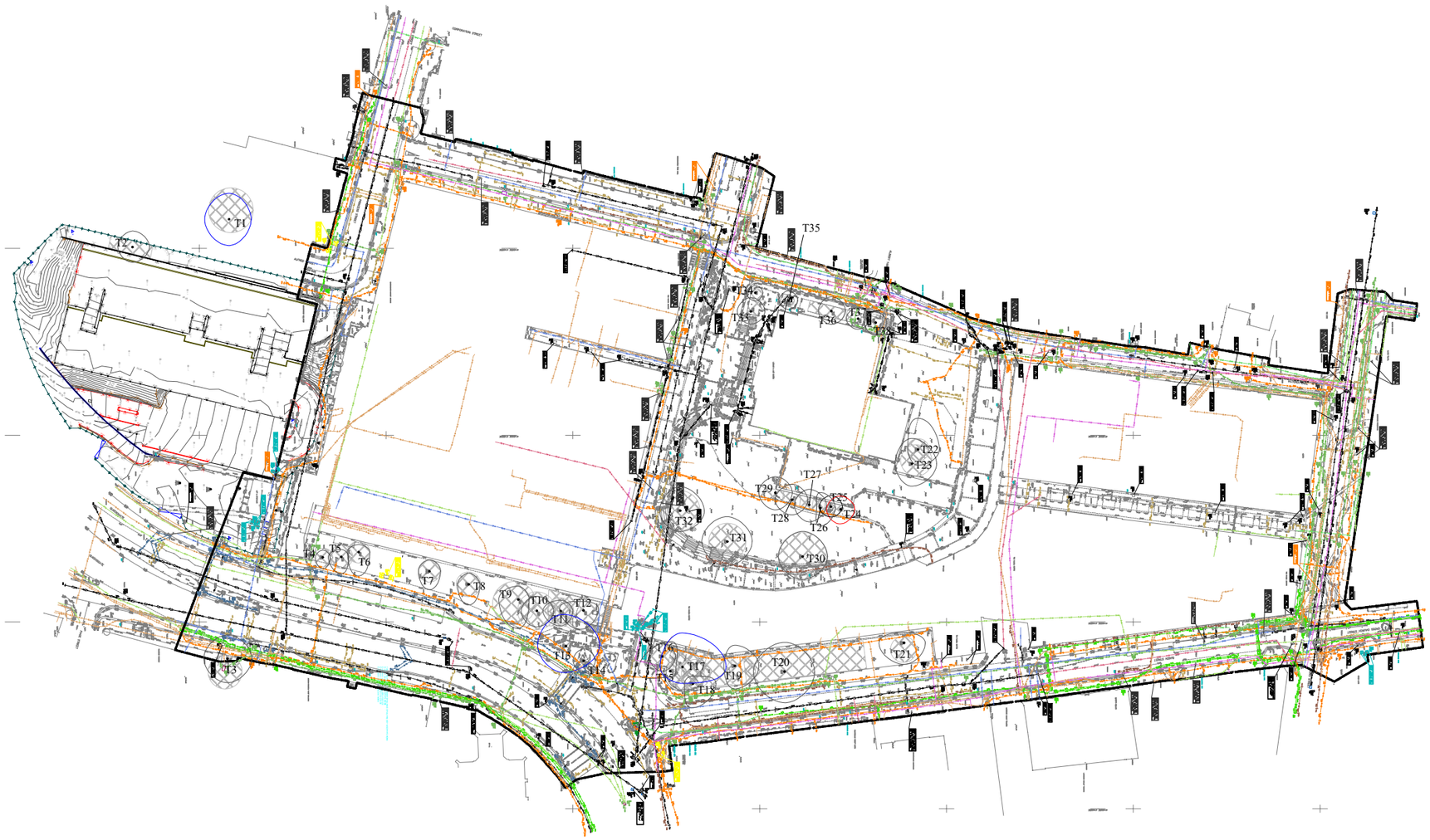
Figure 5: Trees located along Queens Street to the e of the site.

Figure 6: Trees located adjacent to the town hall in the central E of the site.

Figure 7: Trees located to the W of the town hall.

DR-5878-01 Tree Constraints Plan

Indicative N



Brooks Ecological
Ground ideas' advice

Email: vb@brooks-ecological.co.uk
Tel No: 01943 884 451
www.brooks-ecological.co.uk

DR-5878-01 TREE CONSTRAINTS PLAN

Huddersfield Cultural Heart.

Paper Size: A2	**Scale: 1:1000**

BS 5837: 2012 Retention Categories

	CATEGORY A
	CATEGORY B
	CATEGORY C
	CATEGORY U

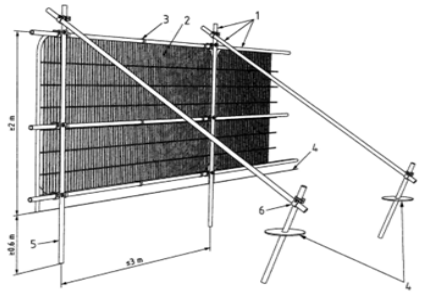
	ROOT PROTECTION AREA
•	TREE STEM

Please note:
The plan is for guidance only
and should not be scaled from.

The original of this drawing was produced in colour - a monochrome copy should not be relied upon.

100 m

DR-5878-02 Tree Protection Plan

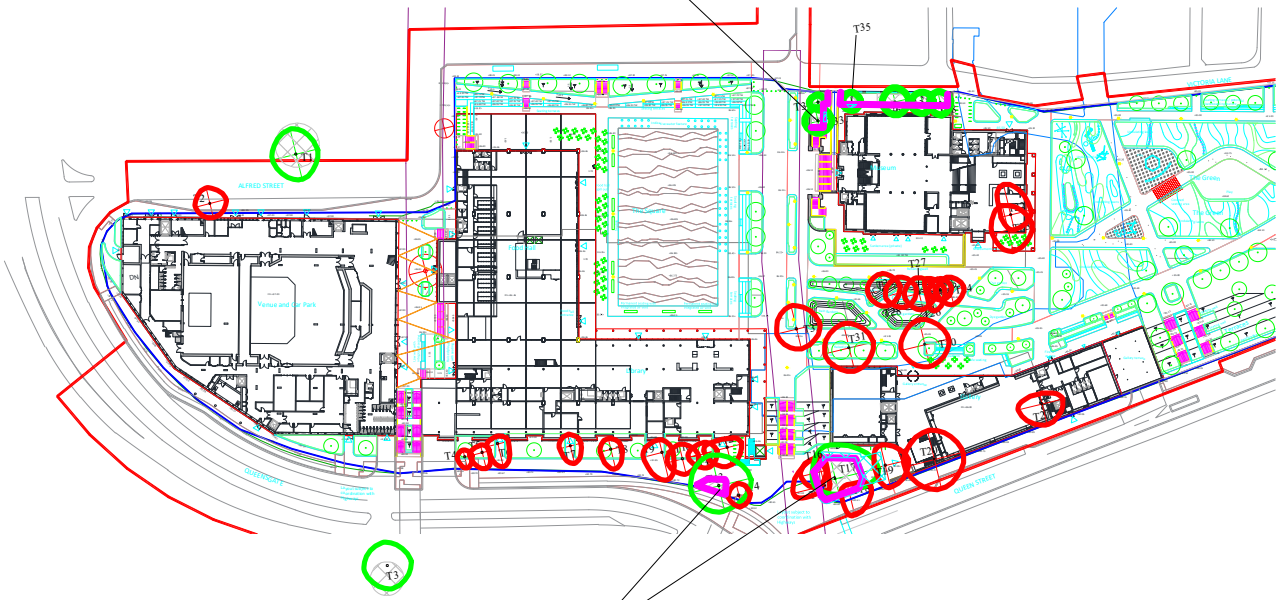


Key
1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Example of Tree Protective Fencing in line with BS 5837:2012.
Please refer to paragraphs 3-6 of the submitted AIA Ref: AR-5878-02 for futher details.

Indicative N

Re-design of planter occuring within this area.
Care must be taken. Hand tools only.
Please refer to paragraphs 10-14 of the submitted AIA Ref: AR-5878-02 for futher details.



Re-design of planter occuring within this area.
Care must be taken. Hand tools only.
Please refer to paragraphs 10-14 of the submitted AIA Ref: AR-5878-02 for futher details.

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DR-5878-02 TREE PROTECTION PLAN

Huddersfield Cultural Heart.

Paper Size: A2	Scale: 1:1000

	Tree to be retained
	Area of RPA not protected by fencing
	Tree Protection Fencing in line with BS 5837:2012
	Tree to be removed

	ROOT PROTECTION AREA
	TREE STEM

Please note:
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